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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,832	08/22/2001	Nobuo Matsui	Q65917	7288

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SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

GOFF II, JOHN L

ART UNIT PAPER NUMBER

1733

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,832

Applicant(s)

MATSUI ET AL.

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 2 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sisson (U.S. Patent 2,713,379).

Sisson is directed to bonding two parts using a magnetic jig. Sisson teaches two parts made of non-metallic materials. Sisson teaches mating the two parts via an uncured adhesive

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layer. Sisson teaches the adhesive layer comprises a thermosetting film, i.e. sheet. Sisson teaches placing the mated portion of the two parts between a pressing magnet jig and a pressure-receiving, soft-magnetic jig such that the adhesive is cured under pressure and a bond between the two parts is formed (Figures 2 and 3 and Column 1, lines 15-19 and Column 2, lines 28-31, 44-50, and 68-70 and Column 3, lines 3-9 and 17-22). It is noted that the magnet jig taught by Sisson applies the magnetic force, i.e. pressure, while the soft-magnetic jig receives the magnetic force, and thus, it appears Sisson anticipates the claims. However, the orientation of the magnet jig and soft-magnetic jig taught by Sisson differs from that shown by applicant in that the magnet jig taught by Sisson is arranged below the soft-magnetic jig. One of ordinary skill in the art at the time the invention was made would have readily appreciated modifying Sisson such that the soft-magnetic jig is arranged below the magnet jig, as the pressing force applied would have been identical whether the magnet jig was above or below the assembly.

Claim Rejections - 35 USC § 103

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisson as applied above in paragraph 4, and further in view of Brown (U.S. Patent 2,519,107).

Sisson teaches all of the limitations in claims 3 and 4 as applied above except for a teaching of attaching cushioning members to the surfaces of the magnetic jig in contact with the two parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach cushioning members to the magnetic jig taught by Sisson as it was well known in the art to use cushioning members to prevent the jig from scratching, deforming, or otherwise damaging the parts.

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Brown is directed to cushioning devices applied to surfaces of clamps, clamping brackets, or the like. Brown teaches the cushioning devices are made from synthetic rubber, Neoprene, etc. Brown further teaches the cushioning devices prevent the surface of the work to which the clamps are attached from becoming scratched, deformed, or otherwise damaged (Figures 1-4 and Column 1, lines 1-11 and Column 2, lines 13-19, 32-37, and 44-48 and Column 3, lines 3-11).

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisson as applied above in paragraph 4, and further in view of the admitted prior art (Specification pages 1 and 2 and the English abstract of JP 10-264257).

Sisson teaches all of the limitations in claims 5 and 6 as applied above except for a teaching of using the magnetic jig to bond two parts made of fiber-reinforced composite material useful for making an aircraft fuselage. It is noted Sisson is generally directed to the bonding of any two parts including non-magnetic parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the magnetic jig taught by Sisson to bond two parts made of fiber-reinforced composite material useful for making an aircraft fuselage as it was known in the art to bond these parts using a jig as shown by the admitted prior art and only the expected results would be achieved.

The admitted prior art is directed to bonding two parts together such as two fiber-reinforced composite materials. The admitted prior art teaches the bonded fiber-reinforced composite materials are used to reduce the weight of transport vehicles including aircraft. The admitted prior art teaches the two parts are bonded through a method comprising applying an uncured thermosetting adhesive prepreg, i.e. sheet, to the mating portion of the two parts, placing

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the mated portion in a jig, and curing the adhesive under pressure to form a bond between the two parts (Specification pages 1 and 2 and the English abstract of JP 10-264257).

7. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Sisson.

The admitted prior art is directed to bonding two parts together such as two fiber-reinforced composite materials. The admitted prior art teaches the bonded fiber-reinforced composite materials are used to reduce the weight of transport vehicles including aircraft. The admitted prior art teaches the two parts are bonded through a method comprising applying an uncured thermosetting adhesive prepreg, i.e. sheet, to the mating portion of the two parts, placing the mated portion in a jig, and curing the adhesive under pressure to form a bond between the two parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to bond the two parts taught by the admitted prior art using a magnetic jig such as the magnetic jig shown for example by Sisson as it was well known in the art to bond two parts using a magnetic jig and only the expected results would be achieved.

Sisson is directed to bonding two parts using a magnetic jig. Sisson teaches two parts made of non-metallic materials. Sisson teaches mating the two parts via an uncured adhesive layer. Sisson teaches the adhesive layer comprises a thermosetting film, i.e. sheet. Sisson teaches placing the mated portion of the two parts between a pressing magnet jig and a pressure-receiving, soft-magnetic jig such that the adhesive is cured under pressure and a bond between the two parts is formed (Figures 2 and 3 and Column 1, lines 15-19 and Column 2, lines 28-31, 44-50, and 68-70 and Column 3, lines 3-9 and 17-22). It is noted that the magnet jig taught by Sisson applies the magnetic force, i.e. pressure, while the soft-magnetic jig receives the magnetic

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force, and thus, it appears Sisson anticipates the claims. However, the orientation of the magnet jig and soft-magnetic jig taught by Sisson differs from that shown by applicant in that the magnet jig taught by Sisson is arranged below the soft-magnetic jig. One of ordinary skill in the art at the time the invention was made would have readily appreciated modifying Sisson such that the soft-magnetic jig is arranged below the magnet jig, as the pressing force applied would have been identical whether the magnet jig was above or below the assembly.

8. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Sisson as applied above in paragraph 7, and further in view of Brown.

The admitted prior art and Sisson teach all of the limitations in claims 3 and 4 as applied above except for a teaching of attaching cushioning members to the surfaces of the magnetic jig in contact with the two parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach cushioning members to the magnetic jig taught by the admitted prior art as modified by Sisson as it was well known in the art to use cushioning members to prevent the jig from scratching, deforming, or otherwise damaging the parts.

Brown is directed to cushioning devices applied to surfaces of clamps, clamping brackets, or the like. Brown teaches the cushioning devices are made from synthetic rubber, Neoprene, etc. Brown further teaches the cushioning devices prevent the surface of the work to which the clamps are attached from becoming scratched, deformed, or otherwise damaged (Figures 1-4 and Column 1, lines 1-11 and Column 2, lines 13-19, 32-37, and 44-48 and Column 3, lines 3-11).

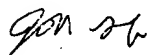
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Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



John L. Goff
May 8, 2003



JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300